Beam Power Tube

NOVAR TYPE

SEPARATE GRID-No.3 BASE-PIN TERMINAL FOR "SNIVETS" CONTROL®

For Horizontal-Deflection-Amplifier Service in Low-B+ Black-and-White TV Receivers

Electrical:

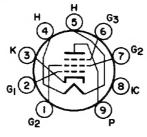
Heater Characteristics and Ratings:	
Voltage (AC or DC)	volts
Current at heater volts = 6.3 1.600	amp
Peak heater-cathode voltage:	
Heater negative with respect to cathode 200 max.	volts
Heater positive with respect to cathode 2006 max.	volts
Direct Interelectrode Capacitances (Approx.) c	
Grid No.1 to plate 0.7	pf
Input: G1 to (K,G3,G2,H) 22.0	pf
Output: P to (K,G3,G2,H) 9.0	pf

Mechanical:

Operating Position
Type of Cathode Coated Unipotential
Maximum Overall Length 3.130"
Seated Length 2.500" to 2.750"
Diameter 1.438" to 1.562"
Dimensional Outline See General Section
Bulb
Base Large-Button Novar 9-Pin with Exhaust Tip
(JEDEC No.E9-88)

Pin 1 - Grid No.2 Pin 2 - Grid No.1 Pin 3 - Cathode Pin 4 - Heater Pin 5 - Heater Pin 6 - Grid No.3 Pin 7 - Grid No.2

Pin 8 - Do Not Use Pin 9 - Plate



Characteristics, Class A | Amplifier:

Basing Designation for BOTTOM VIEW. .

	Triode			
	Connection	ı ^d Conn	ection	
Plate Voltage	125	. 50	130	volts
Grid No.3	Connected	to cath	ode at	socket
Grid-No.2 Voltage	_		125	
Grid-No.1 Voltage	-20	0	-20	volts
Amplification Factor	4.1	_	_	
Plate Resistance (Approx.)	_	_	12000	ohms
Transconductance	_	_	10000	μ m hos
Plate Current	_	525 e	80	ma
Grid-No.2 Current	_	32 e	2.5	ma
Grid-No.1 Voltage (Approx.)		,		
for plate ma = 1	-	_	-40	volts

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HORIZONTAL-DEFLECTION AMPLIFIER

Maximum Ratings, Design-Maximum Values:			
For operation in a 525-line, 30-fram	e sys	tem f	
DC Plate Supply Voltage	770	max.	volts
Peak-Positive-Pulse Plate Voltage	6500	max.	volts
Peak Negative-Pulse Plate Voltage	1500	max.	volts
DC Grid-No.3 (Suppressor-Grid) Voltagea.	75	max.	volts
DC Grid-No.2 (Screen-Grid) Voltage	220	max.	volts
DC Grid-No.1 (Control-Grid) Voltage:			
Negative-bias value	55	max.	volts
Peak Negative-Pulse Grid-No.1 Voltage	330	max.	volts
Cathode Current:			
Peak	950	max.	ma
Average , ,	_	max.	ma
Grid-No.2 Input			watts
Plate Dissipation			watts
Bulb Temperature (At hottest point			
on bulb surface)	220	max.	о _С
			J
Maximum Circuit Values:			
Grid-No.1-Circuit Resistance:			
For grid-No.1-resistor-bias			
operation,	2 2		
opolacion,	4.4	max.	megohms

A positive voltage may be applied to grid No.3 to reduce interference from "snivets" which may occur in television receivers. A typical value for this voltage is 30 volts.

b The dc component must not exceed 100 volts.

C Without external shield.

 $oldsymbol{d}$ with grid No.2 connected to plate at socket.

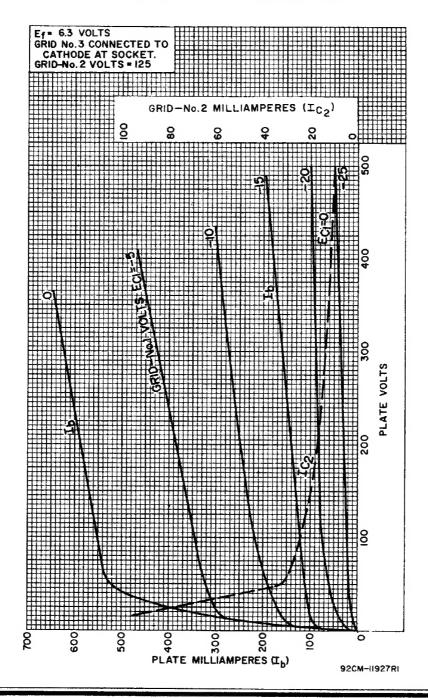
This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

f As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations, "Federal Connunications Commission.

This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system 15 per cent of one horizontal scanning cycle is 10 microseconds.

 $[\]ensuremath{^{h}}$ An adequate bias resistor or other means is required to protect the tube in the absence of excitation.

AVERAGE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS

